

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: METALUX

Report Number: P388280

Luminaire Tested: **22CZ2-95VHE-SQR-UNV-L940-CD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P388280
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-95VHE-SQR-UNV-L940-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7883.9 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

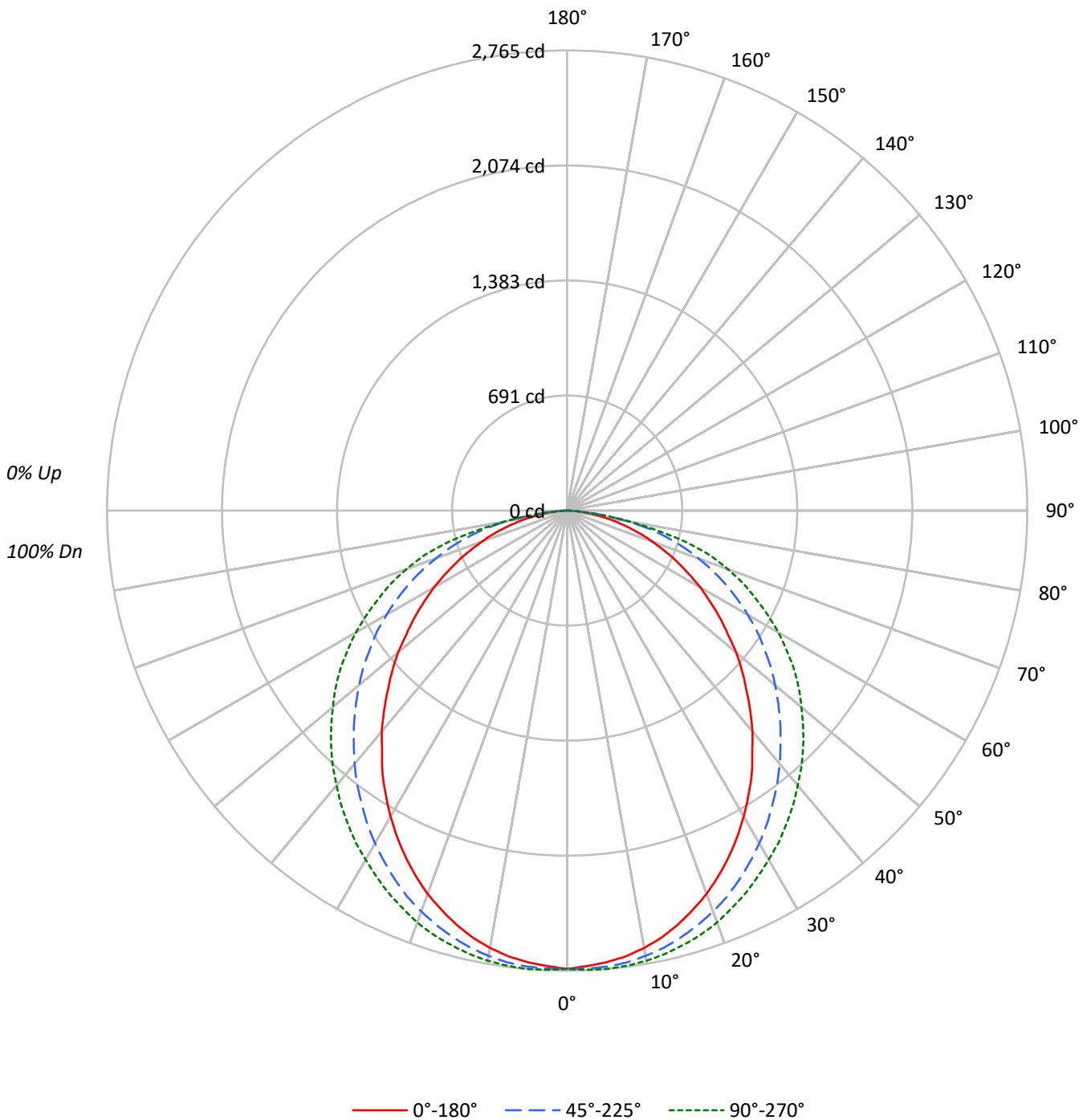
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7411	7411	7411
5°	7358	7429	7470
10°	7290	7423	7505
15°	7172	7391	7526
20°	7019	7340	7544
25°	6822	7266	7533
30°	6593	7174	7523
35°	6355	7068	7547
40°	6086	6980	7571
45°	5796	6892	7633
50°	5545	6830	7692
55°	5249	6777	7812
60°	4974	6746	7894
65°	4646	6695	7958
70°	4269	6595	8067
75°	3851	6419	7781
80°	3305	5683	5856
85°	2658	3350	2658



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.1	3.3
10°-20°	746.5	9.5
20°-30°	1121.2	14.2
30°-40°	1337.1	17.0
40°-50°	1382.5	17.5
50°-60°	1271.0	16.1
60°-70°	1011.9	12.8
70°-80°	618.2	7.8
80°-90°	134.4	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2128.7	27.0
0°-40°	3465.9	44.0
0°-60°	6119.4	77.6
0°-90°	7883.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7883.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2754	2754	2754	2754	2754	
5°	2724	2732	2750	2762	2765	258
15°	2574	2604	2653	2690	2702	725
25°	2298	2354	2447	2515	2537	1057
35°	1935	2017	2152	2264	2298	1207
45°	1523	1632	1811	1957	2006	1178
55°	1119	1242	1444	1609	1665	1001
65°	730	853	1052	1197	1250	723
75°	370	479	617	726	748	395
85°	86	105	108	94	86	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2754.0	2754.0	2754.0	2754.0	2754.0
2.5°	2739.1	2742.8	2754.0	2761.5	2761.5
5°	2724.1	2731.6	2750.3	2761.5	2765.3
7.5°	2701.6	2712.9	2739.1	2754.0	2757.8
10°	2668.0	2682.9	2716.6	2739.1	2746.6
12.5°	2626.8	2649.3	2690.4	2720.4	2727.8
15°	2574.4	2604.4	2653.0	2690.4	2701.6
17.5°	2514.6	2552.0	2611.8	2656.7	2671.7
20°	2450.9	2488.4	2563.2	2615.6	2634.3
22.5°	2376.1	2424.7	2510.8	2570.7	2585.7
25°	2297.5	2353.7	2447.2	2514.6	2537.0
27.5°	2211.5	2278.8	2379.8	2462.2	2480.9
30°	2121.7	2192.8	2308.8	2398.6	2421.0
32.5°	2028.1	2110.4	2233.9	2334.9	2364.9
35°	1934.6	2016.9	2151.6	2263.8	2297.5
37.5°	1826.0	1923.3	2073.0	2189.0	2230.2
40°	1732.5	1826.0	1986.9	2114.2	2155.3
42.5°	1627.7	1728.8	1897.1	2035.6	2084.2
45°	1523.0	1631.5	1811.1	1957.0	2005.7
47.5°	1425.7	1534.2	1721.3	1874.7	1923.3
50°	1324.6	1436.9	1631.5	1788.6	1837.3
52.5°	1216.1	1339.6	1541.7	1698.8	1754.9
55°	1118.8	1242.3	1444.4	1609.0	1665.1
57.5°	1017.8	1145.0	1354.6	1511.7	1564.1
60°	924.2	1047.7	1253.5	1407.0	1466.8
62.5°	823.2	950.4	1152.5	1302.2	1358.3
65°	729.7	853.2	1051.5	1197.4	1249.8
67.5°	636.1	759.6	946.7	1085.2	1145.0
70°	542.6	666.1	838.2	972.9	1025.3
72.5°	460.3	568.8	733.4	856.9	905.5
75°	370.4	479.0	617.4	725.9	748.4
77.5°	288.1	385.4	501.4	550.1	557.5
80°	213.3	288.1	366.7	377.9	377.9
82.5°	142.2	198.3	228.3	232.0	228.3
85°	86.1	104.8	108.5	93.5	86.1
87.5°	29.9	29.9	18.7	11.2	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)